

6 - Special Areas and Places

6.1 Methods of Designation

“Special Management Areas” (SMA’s or “Special Areas”) are defined as FS lands that contain outstanding examples of plant and animal communities, geological features, scenic grandeur, or other special attributes. SMAs can be designated administratively or by legislation. SMAs are managed to emphasize recreational and other specific related values. Other uses are permitted within SMAs to the extent that they are in harmony with the purpose for which the area was designated. By contrast, “special places” are defined by the people who traditionally use them, and are without FS designation.

6.2 Special Management Areas

SMAs on the KRBNG and BKMCNG include the following:

Scenic Byways

Santa Fe Trail Scenic Trail and Byway

The nationally designated Santa Fe Trail extends from Missouri to Santa Fe, crossing through the Kiowa NG 15 miles north of Clayton, New Mexico. Deep wagon ruts can still be seen across two miles of the grasslands area. The trail lies between McNees Crossing and Turkey Creek, both resting and watering areas for the original travelers on the Cimarron route of the Santa Fe Trail¹.

La Frontera del Llano Scenic Byway

La Frontera del Llano (Edge of the Plains) Scenic Byway (NM 39) runs 94 miles south through Harding County and a portion of the Kiowa National Grassland from the town of Abbott along NM 56, through Mills, Roy and Mosquero, before ending in Logan along NM 54. The Byway features remnants of the once thriving mining communities of the region and a number of small mission churches.

Wild and Scenic Rivers

The Canadian River, as it passes through the Kiowa NG at Mills Canyons is undergoing suitability study for Congressionally Authorized Wild and Scenic River status. During the study period, the river corridor is under special management of the KRBNG.

Inventoried Roadless Areas

Canadian River Inventoried Roadless Area, with the Kiowa NG along the Canadian River in Mills Canyon, does not allow road construction or reconstruction. The IRA was designated in 200.

There are a number of types of Special Management Areas on the Kiowa-Rita Blanca and the Blank Kettle National Grasslands, including Scenic Byways, Traditional Plant

¹ USDA FS “Like a Ribbon Across the Prairie: The Santa Fe Trail on the Cimarron, Kiowa and Comanche

National Grasslands,” Pamphlet. The Raton/Colfax County Hispano Chamber of Commerce. “New Mexico’s Santa Fe Trail National Scenic Byway” Map and Guide.

Gathering Places, Traditional Cultural Places, and Developed and Dispersed Recreational Sites. The following briefly identifies and discusses several of the SMA's.

6.3 Recreational Sites

6.3.1 Developed Recreational Sites

Recreational sites are classified by the FS according to a Recreational Opportunity Spectrum (ROS), which describes recreational opportunity areas in terms of the type of experience one may expect to have in a given part of the National Forest or Grassland. The ROS includes six classes: Roaded Natural (RN), Rural, Urban, Primitive, Semi-Primitive Non Motorized and Semi-Primitive Motorized.

Recreational use on the NG Districts is relatively stable, with no significant changes in long term recreational use. Recreational use generally does not exceed the design capacity of the developed sites, although campsites are usually full on major holidays and most weekends.

There is no scientifically valid measure for recreational use on the NGs. While developed recreation use has typically been recorded by the FS as Recreation Visitor Days (RVDs), this unit of measure has been shown to be invalid. Site capacity has been measured by the FS as People At One Time (PAOTs), a measure that likewise has not been commonly accepted in the scientific community.

Tables 6.1 and 6.2 list the developed recreational sites for the Kiowa-Rita Blanca and Black Kettle National Grasslands, respectively. As the tables indicate, the vast majority of the developed recreational sites on the Grasslands are Roaded Natural areas. These areas have “predominantly natural-appearing environments with moderate evidences of the sights and sounds of humans. Such evidences are usually in harmony with the natural environment. Interaction between users may be low to moderate, but evidence of other users is prevalent. Resource modification and practices are evident but harmonize with the natural environment. Conventional motorized use is provided for in construction standards and facilities design.”² There are also a few Rural and Semi-Primitive Motorized developed recreational sites.

Among the most popular developed recreation sites are the following:

Mixed Grass Prairie

There are a number of different types of grasses and numerous wildlife watching opportunities in this area. Nesting birds like the Grasshopper Sparrow, Cassin's Sparrow, and the Dickcissel can be seen here.

² *Ibid.*

Black Kettle Recreation Area

BKRA is located mostly on Dead Indian Lake. Visitors enjoy fishing for catfish, largemouth bass and crappie in lake. Deer, turkeys, quail and other small animals can be seen in the area. Trails are also an attraction

Skipout Lake Recreation Area

SLRA is located partly in cottonwood and partly in the open on Skipout lake. Visitors enjoy fishing for catfish, crappie, sunfish and largemouth bass in lake. Deer, turkeys, quail and other small animals also attract visitors to the area. There is a 2 mi. trail around lake. Busy in spring and in fall for hunting

Croton Creek Wildlife Area

This brushy area attracts visitors that want to see wild turkey, deer, coyotes, porcupine and armadillos.

Spring Creek Lake Recreation Area

Hosts a variety of wildlife species and has a large developed recreation area with both primitive and developed camping sites available. Lake offers opportunities for largemouth bass, catfish and sunfish anglers.

Lake McClellan Recreation Area

The present site of the Lake McClellan Recreation Area includes an historic battlefield site and military trail. The reservoir was built in the 1940s for flood control, recreation and wildlife purposes. Highest recreational use of this area was the 1950s and 60s when the lake stayed full, boats could be rented for waterskiing, and it had a bathhouse, dance-hall and other facilities. Use gradually declined as the water level in the lake dropped and became undependable. There is no live year-round creek that feeds this reservoir. The surface water run off that previously flowed into the lake is now utilized and diverted for agricultural irrigation purposes on surrounding lands, which caused the water level in the lake to substantially diminish. It has also filled in with a huge amount of silt, which would require millions of dollars to remove. Lake McClellan no longer provides dependable opportunities for boating or fishing. This is causing recreational use levels to decline. Over the past 10 years, use levels have typically ranged from 5,000-9000 annually, with a peak of 21,000 in 2001 due to having excess precipitation and a full lake (based on concessionaire records). People following signs from I-40 to “Lake McClellan” are often disappointed when they arrive with their boats and poles at a dry reservoir. It typically functions as a marsh or wetland, with varying water levels depending on rainfall. The area has many trails, including an 8 mile motorcycle and OHV trail that attract visitors, particularly during spring and summer seasons.

Lake Marvin

CG is located mostly in cottonwood on Lake Marvin. Anglers fish for catfish, largemouth bass and crappie in lake. Deer, turkeys, quail and other small animals are common to the area. There are two interpretive trails—one with a wetlands wildlife viewing boardwalk and the other leading to an historic cottonwood tree.

Table 6.1 Developed Recreation Sites for Kiowa-Rita Blanca Grasslands

Mills Canyon Rec. Area	15 sites (06)	Camping, picnicking, fishing, hiking, wildlife viewing. Handicap accessible.
Thompson Grove Picnic Area	-----	Picnicking, day use. Handicap accessible.
Felt Picnic Area	-----	Picnicking, day use. Handicap accessible.
Santa Fe Trail Trailhead	-----	Trailhead parking, interpretive site. Handicap accessible.

Notes: All sites open year-round.

Source: USDA Forest Service, KRBNG Ranger Office.

Table 6.2: Developed Recreation Sites for Black Kettle-McClellan Creek Recreation Sites

Lake McClellan-McClellan Creek National Grassland Recreation Area	60 units	Camping, picnicking, fishing, boating, OHV trails, hiking trails, store/gift shop, RV-trailer parking. Fee area. No handicap facilities.
Lake Marvin Recreation Area	27 units	Camping, picnicking, fishing, boating, hiking trails, RV-trailer parking. Fee area. No handicap facilities.
Black Kettle Recreation Area	12 units	Camping, picnicking, fishing, boating, hiking trails, RV-trailer parking. No handicap facilities. No fee
Skipout Lake Recreation Area	12 units	Camping, picnicking, fishing, hiking trails, RV-trailer parking. No handicap facilities. No fee
Spring Creek Lake Recreation Area	9 units	Camping, picnicking, fishing, hiking trails/trailhead, RV-trailer parking
Croton Creek Wildlife Viewing Area*	-----	Wildlife viewing, hiking trails, trailhead parking area. No fee.
Cheyenne Nature Walk*	-----	Hiking/Interpretive trail

Notes: All sites open year-round.

* Sites developed since 1985 Forest Plan approval.

Source: USDA Forest Service, BKMCNG Ranger Office.

6.3.2 Dispersed Recreational Sites

Grasslands managers identify three dispersed sites on the Kiowa/Rita Blanca Grasslands and 30 on the Black Kettle/McClellan Grasslands. The BKMCNG sites are all roadside pull-outs created for people to use for parking and camping-picnicking-wildlife viewing, as the District has a prohibition on dispersed recreation outside of designated areas, roads

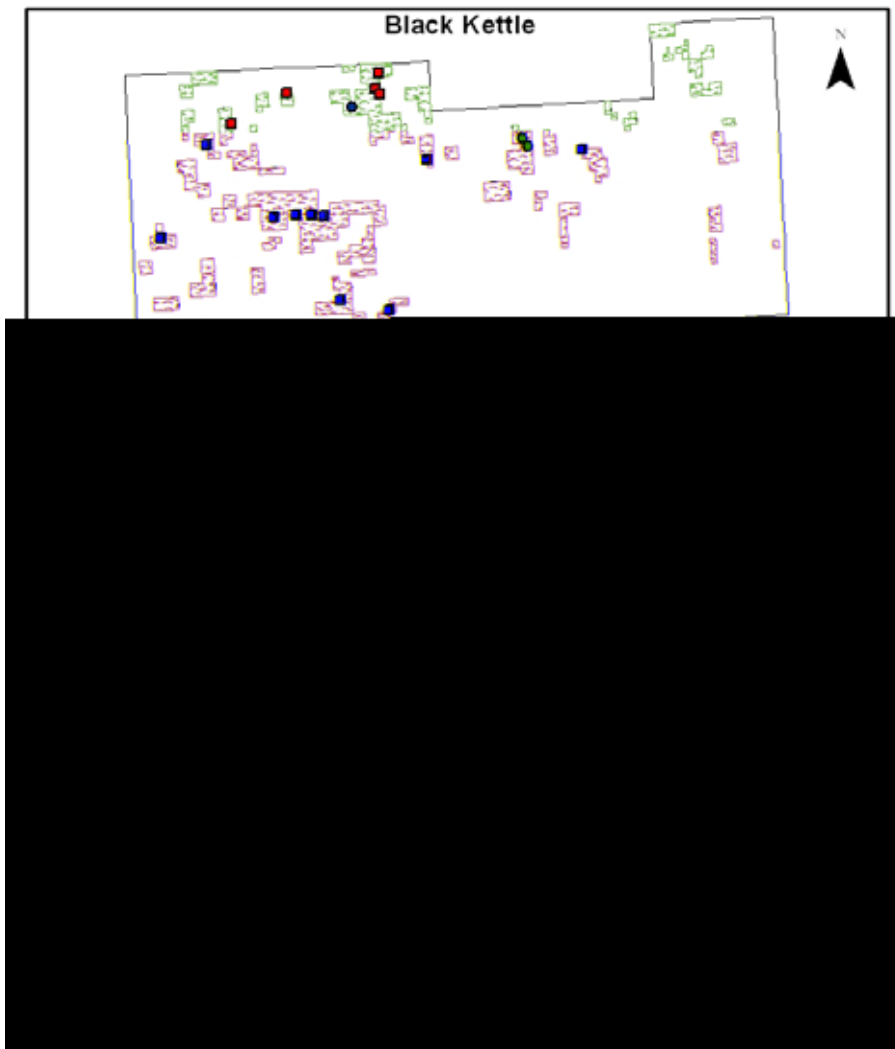


Figure 6.2: Developed and Dispersed Recreation Sites for Black Kettle

6.4 Heritage Resources

In addition to the Santa Fe Historical Trail and La Frontera del Llanos, described in Section 6.2, Kiowa-Rita Blanca and Black Kettle National Grasslands include other significant heritage resources. The following discussion was adapted from a report provided by Cynthia Benedict, Archeologist for the Cibola National Forest.

6.4.1 Mills Orchard and Ranch Site

The Mills Orchard and Ranch site is a historic property that holds significance for the residents who live in and around Roy, New Mexico. This site is located on the Kiowa National Grassland, in the bottom of the Canadian River Canyon. The historic site has been determined to be eligible for inclusion on the National Register of Historic Places and is also listed on the New Mexico State Register of Cultural Properties.

The site extends over several miles in the canyon where Melvin Mills' had extensive orchards established along the floodplain of the river. The site was in use by Mills' from the early 1880s until 1904 when the orchards were wiped out by a flood. The focus of Mills' operation, and the part of the site of greatest interest to the public, are the complex of buildings that served as his ranch headquarters as well as a stage stop. These buildings are in close proximity to the Mills Canyon Campground and are frequently visited by the public who is recreating in the canyon. Stories of individuals from Roy indicate that dances and other social gatherings were hosted at the buildings years after Mills abandoned them. There is a trail leading down the canyon walls just upslope of the buildings that locals used to ride their horses or hike down to attend dances in the early part of the 20th Century.

Structures at the Mills Orchard and Ranch Site have experienced weathering and inadvertent damage to the wall by visitors, as well as graffiti problems. During summer 2005, these buildings were stabilized. A barrier will be constructed to prohibit vehicular access to the buildings. In 2006, the site will be interpreted and a trail constructed to allow the public to access the site by foot, to better protect it. This site is located adjacent to Mills Canyon Campground, which is being expanded in FY06-07, and the interpretive signing will be part of the new campground development project.

6.4.2 Historic Heritage Resources at McClellan Creek Recreation Area

The recreational facilities at Lake McClellan were constructed by W.P.A. labor between 1938 and 1940. What remains of the original facilities have been documented as a historic property on the McClellan Creek National Grasslands. The area and the facilities have undergone numerous episodes of maintenance and improvement, and some of the buildings associated with the early recreation development are now gone. The one remaining feature of the site is the building originally known as the Bath House, but which is now called the Concession Building. It appears to have been the focal point of the development and recreational activities at the lake when it first opened in 1940. It continues to function that way today, as this building is the store and well as the residence for the concessionaire. Originally this building served as the bath house. It had large restrooms with showers. The central portion of the first floor appears to have served as a store and a snack bar. The second floor functioned as a small club room. Very little has changed about the exterior of the building. The concession building is the remaining feature of the site that contributes to site's significance. The site has been determined eligible to the National Register of Historic Places under criterion A³ of USDA – National Register Bulletin 15. Lake McClellan has served as a unique outdoor reservoir recreation site in the panhandle region of Texas for over 60 years and its construction played a vital role in recreation development in the region. There is concern is that OHV use at the MCRA is impacting archeological sites in the area.

³ "An event marking an important moment in American pre-history or history and/or pattern of events or historic trends that make a significant contribution to the development of a community, State or the nation".

6.4.3 Native American Heritage Resources

The Cibola National Forest regularly consults with seven tribes who used or may continue to use the lands now managed as the Kiowa-Rita Blanca, Black Kettle, and McClellan Creek National Grasslands for traditional cultural or religious activities. The Oklahoma tribes include: Kiowa, Comanche, Wichita and Affiliated Tribes, Cheyenne-Arapaho, and Apache Tribe of Oklahoma. The New Mexico based tribes include the Jicarilla Apache and the Mescalero Apache. The following is a brief discussion of historic and contemporary American Indian use of the Southern Plains taken from published sources as well as information obtained during tribal consultation that has occurred between 1998 and 2005.

The Southern Plains tribes view high places (hilltops and other promontories) as significant. Historically, some tribes buried their dead on hilltops near their villages. High places were also used by men seeking visions. Significant promontories include: the Wichita Mountains and Rainy Mountain in southwest Oklahoma, Capulin Mountain in northeastern New Mexico, Antelope Hills northwest of Cheyenne, Oklahoma, and Rabbit Ear Mountain northwest of Clayton, New Mexico. None are located on the National Grasslands. Naturally occurring bodies of water, including streams, are also important.

Areas where traditional plant collection occurred historically and/or continuously could be considered a traditional cultural property. No such areas have been identified on any of the Grasslands units. Both the Jicarilla Apache and Mescalero Apache, as well as some of the Oklahoma tribes, acknowledge continued use of certain plants, but based upon information obtained during consultation, it appears that the plant collection is not being done on the Grasslands units, but rather from plant populations and other sources located closer to their allotted lands or reservations.

To date, one area on the Black Kettle National Grasslands has been documented as a traditional cultural property. A feature of ceremonial importance was identified by representatives of the Cheyenne tribe in the 1980s. In the vicinity are several possible grave sites of individuals who were killed during the fighting along the Washita River in November 1868.

The location and events surrounding the U.S. Army's 1868 attack of the Cheyenne village along the Washita River still holds significance for the Oklahoma tribes. The Kiowa, Arapaho, Comanche, and Plains Apache (Apache Tribe of Oklahoma) all had established camps along the river near Black Kettle's camp and were involved to some degree in the fighting. The location of the Cheyenne camp was, until recently, located on private land, but was sold to the National Park Service in the 1990s. The activity associated with the attack spread beyond the boundaries of what is currently designated as the National Park Service's Washita Battlefield National Historic Park. Stories indicate that some of the Cheyenne killed during the attack, including Black Kettle and his wife, were buried in the hills south of the river on what is now the Black Kettle National Grasslands.

Overall, very little is known about American Indian special places on the National Grasslands. There are several factors that contribute to this lack of information. The semi-nomadic life ways and subsistence patterns of the Southern Plains tribes and

Apachean groups are a factor that contributes to the lack of site visibility on the landscape. The lodgings were typically hide teepees. Brush structures were also common. The wood superstructures associated with the Sun Dance ceremony were also not of a permanent nature. None of these structures was used on a long-term basis and all tend to leave little long-term evidence of their existence. Evidence of temporary camp and resource procurement sites have been found, but these reflect the ephemeral and nomadic use of the area. These archaeological and historic resources do not fit well into the definition of a *special place*, and do not meet the criteria of a traditional cultural property as defined in USDI National Register Bulletin 38.

The Black Kettle National Grasslands fall within the traditional use area of the five Oklahoma based tribes. However, given the fact that these tribes were removed from these lands over 125 years ago, the considerable distance separating these tribes from the National Grasslands, and the more mobile and ephemeral nature of their historic subsistence, it is not surprising that more is not known about the locations of their sacred sites, historic ceremony areas, and traditional plant collection areas. Through years of separation from much of their traditional homelands, these groups have adapted and modified their cultural practices to accommodate resources closer and more easily accessible to them.

Information about special places is generally passed down through oral traditions. In some cases, the oral traditions have been lost, or the elders are unable or unwilling to share the information. In the case of the Kiowa, the elders feel reluctant to share information about significant places that have been “untouched” for so long.

At present, there are no significant heritage resource management issues associated with the historic sites on the National Grasslands.

Contemporary Native American Use of National Grasslands

Both the Jicarilla Apache and the Mescalero Apache acknowledge historic use of the Grasslands, particularly the Kiowa National Grasslands. The Jicarilla acknowledge their use of the Canadian River Canyon bottom, as it has been passed on through their oral traditions. The Jicarilla have knowledge of their ties to historic locations in central and northern New Mexico and still do traditional plant gathering. Camp sites have been located in and near the canyon that can be attributed to nomadic groups, but not definitively connected to a present-day tribe. The Mescalero Apache also acknowledge their historic use of the area near the Canadian River. They view a variety of site types as traditional cultural properties, these can include mountains or mountain ranges, all ceremonial grounds (past and present), markers of many types, travel routes, burials, and a variety of natural features or other locations where activities have occurred. To date, neither tribe has identified traditional cultural properties on the Kiowa National Grasslands, but the Mescalero are working to gather information from tribal elders about significant locations. The Mescalero Apache have indicated that they do most of their plant collection nearer to the mountain Districts of the Cibola National Forest, and not on the National Grasslands. The Jicarilla Apache have identified several plant species in the Canadian River canyon that are used traditionally, but these sources may not have been used since historic times.

6.5 Scenery Resources

Visual Quality Objectives (VQOs) describe the degree of acceptable alteration on the natural landscape. VQO designation is based on the visual range or distance zone, including Bg (background, more than 5 miles), Mg (middleground, from .25 miles to 5 miles) and Fg (foreground, up to .25 miles); diversity and distinctiveness of the scenic features in the area (variety class), including a (distinctive), b (common) and c (minimal, with little or no variety); and importance of the area to viewers (sensitivity level), including 0 (private land not rated), 1 (at least ¼ have concern for scenic qualities), 2 (less than ¼ have concerns), and 3 (unseen from major travel routes). Objective categories including preservation (p), retention (r), partial retention (pr), modification (m), or maximum modification (mm).

Sites on the Kiowa/Rita Blanca and Black Kettle National Grasslands have been assigned visual quality objectives of partial retention (PR) and modification (M). The designations are based on sensitivity levels of 2 (of 3) on all land and the full range of variety class values, with by far the greatest area assigned the lowest value – a ‘C’. VQO values are summarized in Tables 6.3 and 6.4.

Significantly, the Canadian River corridor was determined to be eligible for a “Scenic” designation within the National Wild and Scenic Rivers System due to high scenic values. The Forest Plan VQO for the corridor is “partial retention”, which may be inconsistent with its high scenic values. It may be more appropriate to classify the corridor as “retention” visual quality objective (or “high scenic integrity” objective under the new Scenery Management System). The 1985 Forest Plan currently classifies the Recreation Opportunity Spectrum for the Canadian River corridor as “semi-primitive motorized”. Based on comments from the public and district, and the 2000 Roadless Area designation and 2002 eligible Wild and Scenic River determination, it may be appropriate to consider managing the corridor for “semi-primitive non-motorized” recreation opportunities.

Table 6.3: Kiowa/Rita Blanca VQO

Number of Sites	Distance Zone	variety class	VQO	Sensitivity Level	Total Area in Acres
53	Fg	C	M	2	97,215,928
7	Mg	A	PR	2	32,703,713
8	mg	B	M	2	20,764,979
126	mg	C	M	2	778,831,389

Table 6.4: Black Kettle/ McClellan VQO

Number of Sites	Distance Zone	variety class	VQO	Sensitivity Level	Total Area in Acres
5	fg	A	PR	2	10,574,190
8	fg	B	PR	2	4,290,391
24	fg	C	M	2	16,569,124
57	mg	B	M	2	29,361,179
126	mg	C	M	2	70,487,042

7 - Economic Impacts

7.1 Methodology and Organization

This section examines the economic impacts of the National Grasslands on the local economies. This analysis involves, first, a measurement of the economic value of activities that are directly associated with the grasslands. As detailed in an earlier chapter on **Uses and Users**, the principal activities include ranching, oil & gas extraction, recreation, land management and, to a much less degree, caliche extraction.⁴ The second step is an estimate of the indirect and induced impacts associated with these activities. These estimates are generated with the use of IMPLAN data and software, which uses county-level input-output (I-O) data to determine the extent to which these activities support the growth of the local economy. The third step considers an alternative scenario where it is assumed that land and resources currently managed by the FS is otherwise managed in a manner similar to neighboring privately owned land. Comparing this scenario with the initial scenario determines the *net* impact of FS activities – the result of FS activities rather than the surrounding region.

This analysis draws on a wide range of data and information sources. Data on the structure of the local economics and characteristics of the workforce was gathered mainly from the 2000 Decennial Census summary file 3 and US Department of Labor Local Area Unemployment Statistics. The FS was a principal source of information on the specific activities that occurred on the Grasslands. Specific sources included INFRA (grazing); NVUM (recreation); Cibola Supervisor's office (procurement, wages & salaries); the Kiowa-Rita Blanca Ranger's office provided data on caliche excavation; Black Kettle Rangers' office and the Roger Mills County government offices provided data on revenues from oil & gas extraction on the Black Kettle. The US Department of Agriculture National Agricultural Statistics Service (NASS) was the source of data on agricultural land values and cattle stocking rates. The most valuable sources of information, however, were FS field personnel and local business persons, who provided detailed accounts of otherwise difficult to document activities, including expenditures of hunters, prairie dog shooters, ATV riders and other recreationists, grazing management practices of local ranchers and shopping patterns of FS personnel and contractors.

The chapter begins by describing the structure of local economies, then details the economic activities on the National Grasslands in order to quantify the direct impact of the Grasslands on the local economies. The third section is an analysis of direct, indirect and induced impacts, and the fourth section examines the results of the alternative scenario. The chapter concludes with a brief discussion of other considerations.

⁴ Caliche is a crust or layer of hard subsoil encrusted with calcium-carbonate occurring in arid or semiarid regions. It is extracted through surface excavation, commonly for use in road construction although higher quality caliche can be used as clay in ceramic production. Material excavated from northeastern New Mexico is of moderate quality, and is available in commercial markets for an average price of \$5 to \$7.50 per cubic meter.

7.2 Incomes and Industrial Structure of Counties near the Cibola Grasslands

The grasslands regions historically have been dependent on primary economic activities, including agriculture and oil & gas. In 1999, 17.2% of jobs in grasslands counties were in agriculture and mining, compared to just 2.9% in the three-state region as a whole. Dependence on these primary industries declined during recent years – 21.6% of all jobs were in this sector in 1989 – this restructuring has been much more gradual than that of national and state economies. Further, while state economies followed the national pattern of declining employment in the public sector, particularly in public administration, employment in public administration expanded significantly in grasslands regions. In 1990, only 4.1% of all jobs in the grasslands were in public administration, compared to 5.0% in statewide economies. By 2000, 6.3% of jobs near the grasslands were in public administration versus 4.9% in the states. Only the health services sector, which experienced strong growth throughout the U.S., added more jobs in the grasslands areas during the last decade.



Figure 7.1 Percent of Employment in Primary Sectors by County in 2000

With few exceptions, these trends apply to each of the four grasslands regions. First, the area neighboring McClellan Creek is slightly wealthier than the other three regions, mainly due to income generated by the oil & gas industry and related manufacturing activities in the area of Pampa, located 35 miles from Lake McClellan. Second, employment in the counties of Union, Cimmaron and Dallam near Kiowa/Rita Blanca increased slowly during the 1989-1999 period, while Roger Mills, Hemphill and Wheeler counties saw a decline in the number of jobs. In all parts of the assessment region, employment in agriculture and mining has declined, while the number of health-related and public administrative jobs has, to a less extent, grown.

With the exception of the New Mexican counties of Mora and San Miguel, unemployment has remained relatively low in the assessment region. This owes primarily to the decline in the population of the region, and to a lesser degree the growth of publicly funded services, including health, public administration and education. Unemployment rates for the 13 counties during the 10-year period ending 2004 are shown in Table 7.1.

Table 7.1: Average Annual Unemployment Rate for Selected Counties, 1995-2004 (%)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Colfax County, New Mexico	8.2	11.8	7.8	6.5	5.4	5.0	5.2	5.1	6.4	5.9
Harding County, New Mexico	5.6	4.5	6.5	5.7	3.3	4.1	3.6	3.9	5.3	4.4
Mora County, New Mexico	21.9	20.8	20.8	19.6	16.7	10.5	12.6	12.7	13.4	14.0
San Miguel County, New Mexico	8.9	12.6	10.7	8.4	6.9	5.8	6.6	6.3	6.7	7.1
Union County, New Mexico	4.4	4.7	4.8	4.1	2.6	3.7	2.6	2.7	2.9	2.7
Beckham County, Oklahoma	5.1	4.0	3.5	4.2	4.9	3.2	2.6	3.5	2.7	2.2
Cimarron County, Oklahoma	2.5	2.2	2.1	3.0	2.4	2.1	2.4	3.2	3.0	1.6
Roger Mills County, Oklahoma	3.0	2.8	3.1	4.4	3.5	2.4	1.8	2.8	1.9	1.6
Dallam County, Texas	3.4	3.1	3.7	3.3	2.7	3.3	2.3	2.6	2.9	2.3
Donley County, Texas	3.1	3.2	3.3	5.1	3.6	3.9	2.7	2.8	3.5	3.9
Gray County, Texas	4.8	4.6	4.2	4.9	7.1	4.9	3.6	5.6	5.2	4.3
Hemphill County, Texas	3.4	3.0	3.6	2.9	3.0	2.8	1.7	1.9	1.3	2.1
Wheeler County, Texas	3.9	4.3	2.8	3.3	4.4	3.7	3.1	3.5	2.5	2.3
NM-OK-TX	6.0	5.7	5.3	4.9	4.6	4.2	4.8	6.1	6.5	5.9

Source: Bureau of Labor Statistics, Local Area Unemployment Statistics (LAUS)

7.3 Direct Impact of the National Grasslands on the Local Economies

The principal economic activities on the National Grasslands are ranching, oil & gas extraction (mainly on the Black Kettle), recreation (especially hunting), the management activities of the FS and caliche extraction (on the Kiowa-Rita Blanca).

Table 7.2 is summary of the employment, labor incomes and the value of output directly associated with these activities.⁵ These direct impacts are, in effect, ‘what you see’ – a measure of activities and their economic value as they actually occur on the Grasslands. There are a few important patterns that are evident in this data. First, that Black Kettle, though only one-tenth the size of the Kiowa-Rita Blanca, generates 50% more employment and output, and nearly three times as much labor income. Oil & gas activities account for three-quarters of the labor income and output, and about 41% of the employment, on the Black Kettle. Second, despite the wealth generated by oil & gas, both recreation and ranching create more jobs⁶. However, the average labor income of these jobs is barely one-quarter of the oil & gas industry. Third, Black Kettle houses nearly twice the jobs, income, and employment in recreation as Kiowa-Rita Blanca. Despite its smaller size, the relative ease of access near Interstate 40 fosters more activity. Fourth, the direct activities of FS account for 24 jobs and \$793,548 in labor income--about one-sixth of the total levels. They are evenly distributed between the Kiowa-Rita Blanca and the Black Kettle. Fifth, other resource extraction activities, including

⁵ Labor incomes are the sum of employee compensation and proprietors income.

⁶ Employment figures represent full-time equivalents; no distinction is made between one full-time job and two half-time jobs. In reality, a large share of ranching employment and a good deal of recreational employment is supplementary, “after-hours” employment that is critical to working families of the region.

firewood harvesting and caliche extraction, are marginal, with generally negligible employment and income.

Table 7.2 Direct Impacts of the Grasslands, 2002

DIRECT EMPLOYMENT ASSOCIATED WITH CIBOLA NATIONAL GRASSLANDS					
	Kiowa-Rita Blanca	Mills	Black Kettle	Lake McClellan	Total
Oil and Gas Extraction	0	0	43	1	43
Ranching	43	13	8	0	64
Caliche Extraction	1	0	0	0	1
Visitors & Recreation	18	5	40	2	65
Forest Service Operations	12	0	12	0	24
Total	74	18	102	3	197

DIRECT INCOME ASSOCIATED WITH CIBOLA NATIONAL GRASSLANDS (\$000s)					
	Kiowa-Rita Blanca	Mills	Black Kettle	Lake McClellan	Total
Oil and Gas Extraction	0	0	2,519	42	2,561
Ranching	530	31	1	0	561
Caliche Extraction	15	0	0	0	15
Visitors & Recreation	308	86	526	61	981
Forest Service Operations	416	0	3751	0	981
Total	1,270	117	3,421	104	4,912

DIRECT OUTPUT ASSOCIATED WITH CIBOLA NATIONAL GRASSLANDS (\$000s)					
	Kiowa-Rita Blanca	Mills	Black Kettle	Lake McClellan	Total
Oil and Gas Extraction	0	0	8,077	168	8,244
Ranching	5,508	637	476	0	6,621
Caliche Extraction	40	0	0	0	40
Visitors & Recreation	744	200	1,354	81	2,377
Forest Service Operations ¹	527	0	498	3	1,028
Total	6,819	837	10,404	251	18,311

¹Technically, this does not measure the value of the direct output of Forest Services Operations, but rather the first round indirect and induced output associated with expenditures of employees and contractors supported by NFS. By themselves, wage, salary and contract payments have no impact; the impact occurs only when these individuals spend their earnings. By considering only the initial impact of these expenditures, these numbers provide a useful measure of direct impacts.

Various sources are described in the text.

Questionable results from the model in the Black Kettle Region were found with respect to ranching operations. The ranching portion of the model captures impacts of public ranching operations and the impacts made from ranching improvements. Ranch land improvements are small (\$985 direct labor0ll (a 8 Tc 8.05008 Tw (come) leavrom)\$16.38(pnet9(all (\$985 dr

model results to look for inconsistencies in the model results; results shown below in **Table 7.3**. The BEA data confirm that average employee compensation was lowest in the Black Kettle region, and Kiowa/Rita Blanca had the highest farm employee compensation.

Table 7.3: Comparison of Bureau of Economic Analysis Average Farm Employee Compensation and Implan Cattle Ranching Sector Average Employee Compensation

	Farm Sector ¹			IMPLAN Cattle Ranch Section ^{2,3}
	2001	2002	2003	2002
Black Kettle Region	2,518	2,462	1,878	2,714
Kiowa/Rita Blanca Region	10,806	10,802	10,092	13,981
Mills Canyon Region ⁴	4,289	4,264	4,661	4,251
McClellan Region	3,815	3,721	3,213	...

¹Source Bureau of Economic Analysis (BEA): CA25N & CA06N county tables

²Source: Implan Average Employee Compensation for Cattle Ranching, Based on BBER Grassland Model Areas for public lands grazing

³Implan estimates based on BEA Input-Output tables

⁴No public grazing activity takes place in the McClellan Region Public Lands

7.4 Indirect and Induced Impacts, and the Economic Multipliers

The direct activities associated with the National Grasslands create indirect and induced impacts as businesses and workers make expenditures and purchases, and these funds cycle through the local economy. The sum of the direct, indirect, and induced expenditures constitutes the total impact that the Grasslands have on the economies of the neighboring communities. These impacts, in terms of employment, income and total output, are summarized in Table 7.4. Economic multipliers are shown in Table 7.5. Economic multipliers, equal to the total impact divided by the direct impact, indicate the effectiveness of the industry to generate growth in the local economy. These tables also include data for the alternative private sector scenario, which is discussed in the next section.

In total, the Cibola Grasslands contributes directly or indirectly an estimated 292 jobs and \$7.696 million in income to the economies of the nine counties included in this study. This is equivalent to about 1.25% percent of the 23,593 jobs in these areas in 1999. Ranching on the national grasslands has the greatest total impact, creating approximately 104 jobs, while oil & gas and recreation provide 80 and 75 respectively. Operational expenditures of the Forest Service, including the local indirect and induced impacts of spending by employees and other contractors, accounts for another 32 jobs. The impact of forestry and other mining are negligible.

Of the four regional clusters, Black Kettle has the greatest economic impact, again due to the strength of oil & gas activities and, to a lesser extent, hunting, fishing, and other recreational activities. It is notable that on the Black Kettle, ranching has a very small income impact, mainly because many of the proprietorships show losses in income.

While statistically correct, this may misrepresent an underlying importance of ranching in this region – individuals raise cattle not for their income benefits but for long-term accumulation of capital. In the much larger Kiowa/Rita Blanca National Grasslands, including Mills Upland, grazing allotments make a significant contribution to the local economy, while visitor recreation--in particular, hunting--made a lesser, though still significant contribution.

The economic multipliers shown in Table 7.5 offer additional insights into the economic dynamics of the grasslands. A first observation is that the multipliers are generally quite low, indicating that direct activities either require few inputs or, more likely, that the small local economies are unable to provide many of the inputs, forcing expenditures to leave the region. A second and related note: activities at Mills Canyon and Uplands tend to have somewhat higher multipliers. The extreme isolation of the region severely limits opportunities to use resources from outside the area. Income earned here, particularly in ranching, is more likely to remain in the region.

Table 7.4: Direct, Indirect and Induced Impacts Of Grasslands, with USFS Private Ownership Scenarios, 2002

TOTAL EMPLOYMENT IMPACTS										
	USFS Ownership Employment (#)					Private Ownership Employment (#)				
	Kiowa-Rita		Black	Mc	Total	Kiowa-Rita		Black	Mc	Total
	Blanca	Mills	Kettle	Clellan		Blanca	Mills	Kettle	Clellan	
Oil and Gas Extraction	0	0	78	1	80	0	0	76	1	77
Ranching	70	21	15	0	105	132	45	37	0	213
Caliche Extraction	1	0	0	0	1	1	0	0	0	1
Visitors & Recreation	21	6	46	2	75	20	17	25	2	65
Forest Service Operations	15	0	17	0	32	0	0	0	0	0
Total	106	26	156	3	292	153	62	138	4	356

TOTAL LABOR INCOME IMPACTS										
	USFS Ownership Employment (#)					Private Ownership Employment (#)				
	Kiowa-Rita Blanca	Mills	Black Kettle	Mc Clellan	Total	Kiowa-Rita Blanca	Mills	Black Kettle	Mc Clellan	Total
Oil and Gas Extraction	0	0	3,442	66	3,508	0	0	3,408	67	3,474
Ranching	1,312	172	125	0	1,610	2,472	371	296	0	3,139
Caliche Extraction	19	0	0	0	19	19	0	0	0	19
Visitors & Recreation	381	102	676	74	1,233	383	166	399	35	983
Forest Service Operations	592	0	583	1	3,993	0	0	0	0	0
Total	2,350	274	4,927	141	7,693	2,874	536	4,103	102	7,615

TOTAL OUTPUT IMPACTS										
	USFS Ownership Output (\$000s)					Private Ownership Output (\$000s)				
	Kiowa-Rita Blanca	Mills	Black Kettle	Mc Clellan	Total	Kiowa-Rita Blanca	Mills	Black Kettle	Mc Clellan	Total
Oil and Gas Extraction	0	0	10,873	252	11,125	0	0	11,058	257	11,315
Ranching	93	1,176	932	0	10,075	15,217	2,563	2,223	0	20,003
Caliche Extraction	53	0	0	0	53	53	0	0	0	43
Visitors & Recreation	999	256	1,913	118	3,286	1,646	926	1,849	130	4,550
Forest Service Operations	592	0	600	0	3,993	0	0	0	0	0
Total	9,611	1,432	14,318	370	28,531	16,915	3,490	15,130	386	35,921

Table 7.5: Economic Multipliers for the Grasslands, with USFS and Private Ownership Scenarios, 2002

EMPLOYMENT MULTIPLIERS	
USFS Ownership Employment	Private Owerctwmployment

nearby communities of Clayton, Felt, Boise City and Dalhart. Recreational expenditures are also more likely focused in Clayton and Boise City, where accommodations, food services, and sporting goods retail outlets are located.

The localization of impacts is even more pronounced around Mills Canyon and Uplands. Isolation from larger communities and few opportunities for stop-through business keeps most of their money local. Receivers of grazing permit allotments, with few exceptions, reside in the nearby communities of Roy and Mills, New Mexico. A few retail and food service outlets can be found in Roy. Apart from those, a recreationist is likely to drive 60 miles to Clayton for services.

7.5 Alternative Scenario and the Net Impact of FS Land Management Practices

With the exception of direct expenditures by the Forest Service and their indirect and induced impacts on the economies of the region, the economic benefit associated with the national grasslands owe entirely to the land – specifically, oil & gas, grazing, hunting and other outdoor recreation. In this context, it is reasonable to consider the *net* impact of Forest Service activities to the regional economies. A complete analysis would consider the specific impact of differences in land management practices rather than the absolute value of underlying resources.

An analysis of the net impact is significant for several reasons. First, it offers a more useful measurement of the impact of the Forest Service on the local economy –with or without the presence of the Forest Service; the land would remain a key asset of the local economy. Secondly, scenario comparison allows for direct analysis of the impact of specific Forest Service land management policies, at least in comparison to hypothetical conditions of a market-based land management. Third, the alternative scenario is relevant because it addresses the issue raisnationaiveassenefing

The results of the alternative scenario can be seen in Table 7.5. These suggest a short-term increase of 22% in employment and a marginal 1% decline in incomes relative to current practices. By far, the greatest gains are in ranching, where employment and incomes would approximately double. Employment and incomes in recreation would decline as a result of the restructuring of the sector, with the growth of income by landowners and those involved in the big game hunting industry partially offset by declining employment and income among area business that presently serve smaller scale recreationists.

The impacts of oil and gas remains unchanged or down slightly as a result of a trade-off between the higher royalty rates paid on private lands and declining local expenditures associated with the present regime that directs revenues to local governments that invu 01 Tc -0.0005 905-15

8 - Community Relationships

The relationship between Kiowa-Rita Blanca and Black Kettle National Grasslands and their neighboring communities is significant but complex. The benefits of the Grasslands to local communities are readily apparent – the land is used for grazing, hunting and recreation; its use reduces pressures for overgrazing private lands; a substantial share of royalties from oil & gas activities on the Black Kettle are returned to the area to support schools and transportation projects; and, in a larger sense, FS land management helps to sustain both the communities and the land, helping to make viable a culturally and historically significant way of life on the plains.

However, these relationships vary substantially, both between the two Grasslands districts and among communities that neighbor the Grasslands. As this section describes, the benefits of the National Grasslands tend to be geographically concentrated within communities that are directly adjacent to the Grasslands, but within these communities the benefits are widely and relatively equally distributed.

8.1 The Distribution of Benefits of the National Grasslands

8.1.1 Geographical Distribution of Benefits

The economic, social, cultural and environmental impact of the National Grasslands diminishes sharply with geographical distance. The vast share of benefits associated with the Grasslands accrues to the few communities that are within or immediately adjacent to the Grasslands boundaries. The reason for this geographical concentration of benefits owes to the physical nature of the resources (primarily land) and political-administrative characteristics of land management. As such, there is limited potential to broaden the geographical distribution of the benefits to any substantial degree.

Federal law specifies that royalties from oil & gas exploration on federal land is to be divided equally between Federal and State governments. Oklahoma's law, in turn, divides the proceeds equally between the State treasury and the counties within which the federal land resides. In the case of the Black Kettle, one-quarter of the substantial proceeds of oil & gas activities on the Grasslands is thus returned to Roger Mills County; the remaining shares benefit the nation and the residents of Oklahoma as whole.

Analysis of the grazing permits indicates that the vast majority of the permits are held by residents and ranching operations based in the villages and towns that are immediately adjacent to the Grasslands; those of communities more than 20 or 30 miles from the Grasslands hold very few permits.

Discussions suggest that local hunters, who are most familiar with wildlife habitats, are more likely to make use of federal lands for the hunting of larger game. By contrast, out of town hunters are more likely to hunt on private land where harvests are restricted and activities are supported by outfitters that offer guides, provisions and guarantees of quality hunts.

Where available, NVUM data indicates that recreational use is roughly evenly divided between persons who live very close to the Grasslands and make regular use of the area, or passers-by who reside a considerable distance from the Grasslands. Those living at an

intermediate distance – between 30 and 250 miles from the Grasslands – appear to make very little use of the recreational opportunities afforded by the Grasslands.

Finally, the scenic beauty of the Grasslands and their effect in reducing pressure on the use of private land benefit almost entirely communities that are closest to the Grasslands. This finding is supported by the patterns evident in grazing permits, and available traffic data which suggests that use of roads adjacent to the Grasslands is limited to local traffic.

8.1.2 Social Distribution of Benefits

While benefits of the Grasslands are highly concentrated geographically, this assessment suggests that *within* local communities the benefits are widely and relatively equally distributed. Analysis of grazing permits suggests that, until very recently, there has been no significant concentration in the distribution of grazing permits among individuals and ranching operations. No single entity has controlled more than 10% of either allotments or permitted AUMs in either of the Grasslands Districts. Again, the benefit of the Grasslands in reducing the pressure of overgrazing on private land benefits the local communities at large, contributing to the ecological and economic sustainability and scenic integrity of the land.

Furthermore, royalties earned from oil & gas activities on federal land in Roger Mills County benefit a broad cross-section of the County's residents. The County dedicates its full share of royalties (\$388,000 in 2001) to schools (66.7%) and roads (33.3%), benefiting nearly all members of the community. Finally, the economic analysis conducted in this assessment suggests that funds spent by the FS, including salaries and wages and other direct expenditures, tend to remain in the local communities – perhaps more so in the isolated Kiowa-Rita Blanca area than in the Black Kettle. This ensures that the benefits of federal spending circulates broadly within neighboring communities, supporting property values and creating jobs and incomes for people working in several economic sectors and at many occupational levels.

8.2 Community Profiles and Involvement with the National Grasslands

A central concern of this socioeconomic assessment is to understand the differences that exist both between the Kiowa/Rita Blanca and Black Kettle/McClellan Creek Districts and among the various communities that neighbor each of the Districts. The differences are pronounced, and management practices must be sensitive to these differences. This section offers a brief profile of the communities, and highlights their unique relationships with the National Grasslands.

8.2.1 Communities neighboring the Kiowa-Rita Blanca National Grasslands

The Kiowa/Rita Blanca region is characterized by very low population density, limited accessibility and a high level of dependence on agricultural activities. According to the 2000 Census, the combined population of the four counties within which the Kiowa/Rita Blanca is situated (Harding and Union, New Mexico, Cimarron, Oklahoma and Dallam, Texas) is only 14,354, up 3.5% since the 1990 Census. Dalhart, Texas, located 53 miles from the nearest boundary of the Rita Blanca, is the closest town with a population greater than 5,000 persons; Amarillo, Texas, 115 miles from nearest boundary, is the closest city with 20,000 or more persons. Nearly 28% of all employment in the four-county region was in agriculture, more than five times the average share for the three-state region.

Clayton, New Mexico

The headquarters for the Kiowa/Rita Blanca National Grasslands is located in Clayton, New Mexico, a small town with a 2000 population of 2,539 persons. By far the largest community in Union County, with 59% of its population, Clayton is the county seat. The town is also the principal commercial center for a thinly populated region of at least 4,250 square miles, including Union County, northern Harding County, eastern Colfax County, and the western portions of Cimarron County, Oklahoma and Dallam County, Texas. The town's economy generally reflects that of the region as a whole – a large share of employment in agriculture and limited employment in manufacturing, and a somewhat larger concentration of employment in services such as retail, health, and public administration. Despite its status as the County Seat, household and per capita incomes in Clayton are low, below the averages of Union and Harding Counties and those of smaller communities that Clayton serves.

Table 8.1: Clayton, NM Summary

CLAYTON, NEW MEXICO (Union County, Seat)				
	1990	2000	Change	2004
Population	2,424	2,539	4.7%	
Income, Per Capita (\$)	\$10,587	\$13,967	31.9%	
Poverty (%)	25%	18%	-29.0%	
Employment, Agric & Mining (%)	13%	17%	33.6%	
Employment, Public Admin (%)	10%	7%	-26.6%	
Grazing Permits/Population (000s)				23.63
AUM/Population (000s)				6018.51

Clayton's relationship with the Kiowa/Rita Blanca National Grasslands is, in most regards, stronger than that of any other community in the region. The town is situated within the boundaries of the Kiowa Grassland, and has significant economic ties to the Grasslands. Much of the income paid to FS personnel at the headquarters is spent in Clayton; permits for the use of 60 of the 327 active allotments in the Grasslands are held by ranching operations based in Clayton; and local businesses benefit from spending by contractors to the FS and visitors to the Grasslands. In addition, feedlot operations in Clayton benefit from cow-calf operations on the Grasslands. Further, taxes on these

receipts from all these activities contribute to the town's finances. Socially and culturally, too, the community is tied to the Grasslands, in its appreciation of its scenic resources, historical legacies and recreational opportunities.

Texline, Texas

Located on the boundary of the Rita Blanca National Grasslands just 10 miles southeast of Clayton, Texline is a rural community of 502 persons. Like other small towns in the region, Texline depends on ranching and rural services for much of its employment; in addition, because of its location along Highway 87, which links Clayton with the larger center of Dalhart, Texas, the town has a relatively larger wholesale and transportation economy than is found in neighboring communities. Access to FS land benefits the ranch-based economy of Texline – 15 allotments are permitted to ranchers in Texline, a number comparable to Clayton in relation to population differences. However, because of its proximity to Clayton, where FS-related employment and services are concentrated, Texline receives few other direct economic benefits from the National Grasslands. To illustrate this point, according to the 2000 Census Texline had only 9 jobs in area of public administration, compared to 81 in Clayton.

Table 8.2 Texline, TX Summary

TEXLINE, TEXAS (Dallam County)				
	1990	2000	Change	2004
Population	412	502	21.8%	
Income, Per Capita (\$)	\$9,122	\$15,086	65.4%	
Poverty (%)	16%	11%	-30.8%	
Employment, Agric & Mining (%)	18%	16%	-8.5%	
Employment, Public Admin (%)	-	3%		
Grazing Permits/Population (000s)				33.86
AUM/Population (000s)				9290.84

Boise City, Oklahoma

Boise City, with a 2000 population 1,499, is the third largest community in close proximity to the Kiowa/Rita Blanca National Grassland. Located approximately 20 miles north of the Rita Blanca National Grasslands along Highway 56, the principal link that ties Boise City to the National Grasslands is the Historic Santa Fe Trail. The Trail has designated status within the Grasslands and is popular destination for persons visiting the region. The economy of Boise City, like that of others in the region, is highly dependent on ranching. However, because of the distance that separates the town from the FS land on the Grasslands, Boise City ranchers utilize Grasslands allotments at a rate somewhat lower than those of Clayton and Texline.

Table 8.3 Boise City, OK Summary

BOISE CITY, OKLAHOMA (Cimmaron County, Seat)				
	1990	2000	Change	2004
Population	1,526	1,499	-1.8%	
Income, Per Capita (\$)	\$10,558	\$15,821	49.8%	
Poverty (%)	18%	19%	5.6%	
Employment, Agric & Mining (%)	18%	17%	-3.3%	
Employment, Public Admin (%)	7%	8%	7.4%	
Grazing Permits/Population (000s)				14.68
AUM/Population (000s)				3235.49

Roy, New Mexico

Located in Harding County, New Mexico, Roy is the closest neighbor to Mills Canyon and Uplands. With a 2000 population of 316 of the County's 810 residents, it's the largest town in Harding County. Its small economy, with 124 jobs, depends largely on ranching and the provision of services to surrounding rural communities. Agriculture is the principal activity, and is supported by jobs in public administration and health services. The community's ranchers make extensive use of FS land – combined with permittees who reside in the nearby community of Mills (which forms part of Roy according to Census Bureau data). 42 allotments on the Kiowa/Rita Blanca are held by the local ranchers, a rate that far exceeds that of any other community in the region. Further, residents of Roy receive FS contracts for tree thinning and earn small additional incomes from wood cutting in the Mills Canyon area. However, because of the availability of business in the service industry, expenditures by FS personnel, contractors and visitors to the Grasslands are considerably less than in the larger town of Clayton. To the extent that expenditures do benefit the local economy, they are erratic and difficult to incorporate into planning.

Table 8.4: Roy, NM Summary

ROY, NEW MEXICO (Harding County)				
	1990	2000	Change	2004
Population	380	316	-16.8%	
Income, Per Capita (\$)	\$8,709	\$17,651	102.7%	
Poverty (%)	10%	15%	51.9%	
Employment, Agric & Mining (%)	2%	17%	1017.7%	
Employment, Public Admin (%)	20%	15%	-25.1%	
Grazing Permits/Population (000s)				28.48
AUM/Population (000s)				8651.90

Dalhart, Texas

Dalhart, the largest community within 50 miles of the Kiowa/Rita Blanca Grasslands, is a commercial center for the agricultural industries for the northwestern corner of the Texas panhandle, and serves as important link between ranching on the Grasslands and the final market for cattle. Located 26 miles south of the Rita Blanca boundary, access to Grasslands allotments by Dalhart-based ranchers is approximately one-third that of Clayton and Texline when adjusted for the size of the economy and community. However, whereas ranching activities in areas that neighbor the Grasslands focus mainly

on cow-calf operations, those of Dalhart emphasize yearling operations that employ feed lots and irrigated crop fields that are common to southern Dallam County. Thus, a reciprocal relationship exists between ranching on the Grasslands and commercial operations of Dalhart's cattle industry. The significance of this relationship is evident in the strength of the wholesale and transportation sectors of Dalhart's economy.

Table 8.5 Dalhart TX Summary

DALHART, TEXAS (Dallam County, Seat)				
	1990	2000	Change	2004
Population	6,270	7,241	16%	
Income, Per Capita (\$)	\$11,503	\$16,530	43.7%	
Poverty (%)	15%	12%	-23.1%	
Employment, Agric & Mining (%)	14%	18%	24.1%	
Employment, Public Admin (%)	4%	8%	81.1%	
Grazing Permits/Population (000s)				7.60
AUM/Population (000s)				1863.14

Social and cultural differences mirror the differences that exist in the economic structure of Dalhart's agricultural operations. The landscape is notably different: flatter, with large irrigated fields, commercial agricultural structures, stockyards, multiple lane highways and larger settlements.

8.2.2 Communities neighboring the Black Kettle/McClellan Creek National Grasslands

Although the communities that neighbor the Black Kettle and Lake McClellan share the rural character of those near the Kiowa/Rita Blanca, there are significant differences. The communities of Black Kettle and McClellan Creek are far more accessible, within miles of Interstate 40. They benefit from the significant wealth generated by the development of the oil & gas industries; and, despite a higher standard of living, are experiencing a very rapid decline in population. Also, perhaps because of the scarcity of public land in Texas and Oklahoma, the Grasslands play a somewhat different role in the social and cultural affairs of the region.

Cheyenne, Oklahoma

Cheyenne, located in the center of Black Kettle National Grasslands, is the Seat of Roger Mills County and home to the Headquarters of the Black Kettle/McClellan Creek National Grasslands. Located 26 miles from I-40 along Highway 287, Cheyenne has a population of 777, approximately 23% of that of the County. Employment in the community is relatively balanced, although the public sector supports a large and growing share of employment. By industry, agriculture, mining, construction, retail, health and social services, education and public administration each provide 6% or more of total employment in the town. Incomes are modest by state and national standards, but well above those of many of the smaller communities in the area.

Table 8.6: Cheyenne, OK Summary

CHEYENNE, OKLAHOMA (Roger Mills County, Seat)				
	1990	2000	Change	2004
Population	965	777	-19.5%	
Income, Per Capita (\$)	\$9,265	\$16,428	77.3%	
Poverty (%)	16%	18%	12.4%	
Employment, Agric & Mining (%)	14%	14%	-3.4%	
Employment, Public Admin (%)	4%	7%	50.4%	
Grazing Permits/Population (000s)				33.46
AUM/Population (000s)				3768.34

The relationship between the Town of Cheyenne and the Black Kettle National Grasslands is strong. Although the community is less dependent on agriculture and ranching than many others in the region, ranchers operating out of Cheyenne control 26 of the 122 active allotments on the grasslands. Further, because of the location of the District offices in the town, FS contributes directly to employment and incomes. Perhaps more important in economic terms, royalties from oil & gas operations on the FS land fund schools and roads throughout Roger Mills County, with the largest concentration in Cheyenne. The role of the National Grasslands in social, cultural and environmental life of the community is no less significant. Cheyenne was at the center of the Dust Bowl experience of the 1930s, and the land management practices of the Forest Service today help to foster within the community a sense of history and viability.

Reydon, Oklahoma

Reydon is a rural residential community of 152 persons situated within the boundaries of the Black Kettle Grasslands. Because of the small size of the community and its location within the Grasslands boundaries, Reydon's relationship with the National Grasslands is remarkably strong. Of the 73 employed persons living in Reydon, 18 work in education, most of them in schools that are funded by oil & gas royalties generated on federal land. Further, 24 grazing allotments are held by 14 permittees who live in Reydon, a number that, in relation to its population, far exceeds that of any similar community.

Table 8.7 Reydon, OK Summary

REYDON, OKLAHOMA (Roger Mills County)				
	1990	2000	Change	2004
Population	220	152	-30.9%	
Income, Per Capita (\$)	\$6,242	\$16,721	167.9%	
Poverty (%)	35%	11%	-68.0%	
Employment, Agric & Mining (%)	15%	11%	-26.0%	
Employment, Public Admin (%)	-	8%	-	
Grazing Permits/Population (000s)				164.47
AUM/Population (000s)				13401.32

Canadian, Texas

Canadian is located a few miles from Lake Marvin, a unit of the Black Kettle National Grassland, and approximately 75 minutes from Cheyenne. Canadian has a population of 2,236 and is the Seat of Hemphill County in the eastern panhandle of Texas. The area surrounding Canadian is prosperous by regional standards, due to the wealth generated by Hemphill's oil & gas industries and the success of the community is establishing a regional center for tourism. Canadian's relationship to the National Grasslands differs sharply from those of other communities in the Black Kettle region. No grazing permits on the Black Kettle are held by persons in Canadian, and oil & gas operations on the Lake Marvin unit are marginal and offer little support to community finances. However, Canadian has actively incorporated Lake Marvin and the regional lore of the southern plains to establish a recreational industry, developing partnerships to support and maintain these assets.

Table 8.8: Canadian, TX Summary

CANADIAN, TEXAS (Hemphill County, Seat)				
	1990	2000	Change	2004
Population	2,420	2,236	-7.6%	
Income, Per Capita (\$)	\$13,320	\$16,384	23.0%	
Poverty (%)	8%	14%	69.4%	
Employment, Agric & Mining (%)	25%	21%	-16.5%	
Employment, Public Admin (%)	4%	6%	58.8%	
Grazing Permits/Population (000s)				0.89
AUM/Population (000s)				5.37

Elk City, Oklahoma

Located east along I-40, approximately 30 minutes from Cheyenne, Elk City is a regional service and retail center for communities that neighbor the Black Kettle National Grasslands. With a population of 10,595, Elk City is home to the regional medical center, several nursing homes, a Wal-Mart, two supermarkets and a food distribution center. Relations with Black Kettle are indirect and of secondary importance to the town. Salary and contract payments by the FS and expenditures of visitors to the Black Kettle circulate through the Elk City economy, but as a regional and I-40 service center these revenues likely represent a small share of community's revenues. Elk City is located in Beckham County, Oklahoma, and receives no royalties from oil & gas operations on the National Grasslands. Only two grazing allotments on the Black Kettle are held by residents of Elk City.

Table 8.9: Elk City, OK Summary

ELK CITY, OKLAHOMA (Beckham County)				
	1990	2000	Change	2004
Population	10,428	10,595	1.6%	
Income, Per Capita (\$)	\$10,511	\$15,654	48.9%	
Poverty (%)	18%	19%	4.4%	
Employment, Agric & Mining (%)	16%	12%	-24.5%	
Employment, Public Admin (%)	2%	6%	162.3%	
Grazing Permits/Population (000s)				0.19
AUM/Population (000s)				1.13

Groom and McLean, Texas

The towns of Groom and McLean are located along I-40, approximately 15 miles east and west of McClellan Creek, respectively. The towns have populations of 559 and 819, and because ease of access to McClellan Creek and its proximity to Amarillo the economic benefits of the FS property to these communities is minimal. It is likely that some residents of these communities enjoy recreational opportunities that McClellan Recreation Area offers.

8.3 Partnerships

The Kiowa-Rita Blanca and Black Kettle National Grasslands partners with a large number of public and private agencies on projects that focus principally on grasslands ecological management and ecotourism and economic development. Partnerships vary according to the type of contributions made by the parties, which can be broadly categorized as funded and non-funded (volunteer or in-kind). The following describes some of the largest projects. They are summarized in Table 8.10.

During recent years, the number of partnerships undertaken by the National Grasslands has significantly. From 1990-2000, there was only one active partnership; the number of active partnerships increased to four in 2001; to nine in 2002; 16 in 2003; and 19 in 2004.

8.3.1 Kiowa/Rita Blanca National Grasslands Partnerships

A major project in the Kiowa/Rita Blanca region is the **Canadian River Riparian Restoration Project**. This is an expansive project covering much of the river areas ranging from Colorado to Texas. The cooperative includes soil and water conservation districts, counties, state and federal agencies as well as private landowners working together to locate and remove Salt Cedar trees from the ecosystem. Salt Cedar is an invasive plant that threatens some of the native plant species in the area.

Table 8.10: Partnerships by Year and Kind

Cooperator name/Project	Year	Expiration Date	NFS (\$)	NFS In-Kind (\$)	Partner (\$)	Partner In-Kind (\$)	Total
Kiowa Rita Blanca			282,149	0	353,927	1,667	637,743
Cimarron Heritage Center	2004	9/30/2004	3,700	0	2,561	0	6,261
City of Clayton	2001	8/31/2002	5,000	0	1,500	0	6,500
City of Felt, OK --Development of Felt Picnic Area							...
Dinosaur tracks brochure and tourism development	2003	9/30/2004	5,600	0	2,625	0	8,225
El Llano Estacado RC&D	2003	9/30/2004	19,000	0	7,625	0	26,625
Collaboration During Forest Planning							...
Kansas State University	2004	9/30/2005	5,000	0	0	1,667	6,667
National Wild Turkey Federation	2001	12/31/2004	5,800	0	5,000	0	10,800
New Mexico Game and Fish -- Sikes Act	2004	9/30/2005	223,689	0	307,596	0	531,285
New Mexico Museum of Natural History							...
Playa Lakes Joint Venture	2003	9/30/2004	2,160	0	1,000	0	3,160
Rita Blanca Quail Unlimited		12/31/2007					...
Rocky Mountain Bird Observatory							...
Texas Tech -- Ferruginous Hawk Monitoring	2003		7,600	0	24,870	0	32,470
USDA Natural Resources Conservation Service	2002		0	0	0	0	0
Village of Moquero, NM							...
Village of Roy	2003	6/30/2005	4,600	0	1,150	0	5,750
Texas Tech--Swift Fox research	2001						...
University of Kansas -- Echinacea plant conservation	2002						...
New Mexico State Environment Department	2002	12/30/2007					...
University of Central Oklahoma	2002						...
National Park Service	1990						...
Natural Resources							...
Texas, Oklahoma, New Mexico Counties Cooperative							...
Law Enforcement and Patrol Agreements							...
Black Kettle/ McClellan			786,238	36,056	121,424	13,500	957,218
Canadian Chamber of Commerce/Hemphill County	2005	9/30/2010	3,300	0	0	0	3,300
Gray County, Texas	2002	9/30/2004	3,200	4,300	0	8,000	15,500
Gray County, Texas Sheriff's Dept.	2005	9/30/2010	2,800	0	0	0	2,800
National Park Service, Washita National Battlefield	2003	9/30/2008	745,000	0	32,274	0	777,274
National Wild Turkey Federation	2001	12/31/2004	5,800	0	5,000	0	10,800
Oklahoma Department of Wildlife Conservation	2002	12/31/2008	9,500	20,568	27,500	5,500	63,068
Oklahoma Orthological Society							...
Oklahoma State University							...
Playa Lakes Joint Venture	2000	9/30/2002	8,500	5,000	8,500	0	22,000
Playa Lakes Joint Venture/Ducks Unlimited							...
Quail Unlimited, Oklahoma Chapter	2003	9/30/2005	3,000	0	19,400	0	22,400
Roger Mills County	2003	9/30/2003	4,000	0	4,000	0	8,000
Texas Parks and Wildlife	2002	9/30/2004	0	6,188	24,750	0	30,938
Coordination of Interagency Invasive Weeds Mgt.	2000		1,138	0	0	0	1,138
GRAND TOTAL			1,068,387	36,056	475,351	15,167	1,594,961

The Mesa Soil and Water Conservation District is another large partnership cooperative. Partners include the USDA Forest Service, Natural Resources Conservation Service, State Wildlife Agencies, Quail Unlimited, the Clayton Livestock Research Center, local counties, local ranchers, and the NMSU Cooperative Extension Service.⁹ Together, these partners work on managing the National Grasslands for greater productivity and healthier forage.

⁹ <http://www.redlodgclearinghouse.org/stories/kiowagrasslands.html>

Other partners for Kiowa/Rita Blanca include Texas Tech University; Kansas State University; the New Mexico Museum of Natural History; The Natural Resource Conservation District; the Rocky Mountain Bird Observatory; the Rita Blanca Chapter of Quail Unlimited; the Cimarron Heritage Center; the Playa Lakes Joint Venture; the National Wild Turkey Federation; Wallace Burner; the village of Felt in Cimarron County, Oklahoma; the villages of Roy and Mosquero and town of Clayton in New Mexico; Harding County, New Mexico; and the Eastern Plains Council of Governments.

8.3.2 Black Kettle-McClellan Creek National Grasslands Partnerships

The Black Kettle and McClellan Creek National Grasslands are involved in numerous partnerships for the purpose of improving the grasslands areas. The goal of most of the partnerships is to enhance the grasslands ecology and attract visitors to the area for eco-tourism. The Black Kettle Grasslands Forest Service [office/site] works closely with the Texas Prairie Rivers Association, National Park Service, Oklahoma Birding Trail and Gateways Community Development. These groups are working towards a coordinated effort under the umbrella of the Oklahoma Heritage Alliance. The common goal is to promote positive economic relationships among these communities and the tourist infrastructure in the region.

Aside from these types of partnerships, the Black Kettle-McClellan Creek District staff also sit on a number of advisory boards in surrounding communities. Examples include the Lessor Prairie Chicken Interstate Working Group, the Oklahoma Blacktailed Prairie Dog Working Group, the Texas Prairie Rivers Board, and the Oklahoma Heritage Alliance. They are also working toward expanding prescribed burning for habitat restoration on non-Forest Service lands by partnering with the NRCS and US Fish and Wildlife.

9 - Principal Findings and Recommendations

The principal finding of this study is that the National Grasslands make a small but significant contribution to the social, economic and ecological sustainability of communities of northeastern New Mexico, Northwestern Oklahoma and the Texas panhandle. The impact of the National Grasslands is not broad, but where it is evident it is important. This summary conclusion emerges from the following more specific findings.

9.1 Principal Findings

1. The regions covered in this assessment face difficult social and economic challenges.

While the population of southwestern United States has been growing at a rate substantially higher than that of the nation as a whole for several decades, the population of northeastern New Mexico, northwestern Oklahoma and the north Texan panhandle fell by 11% between 1980 and 2000. At the same time, the population is aging. These demographic trends are explained in part by slow economic growth. The labor force of the region is disproportionately engaged in labor intensive agricultural activities that generate low profits. Technically advanced activities are largely absent, and the geographical isolation of the area and the limited size of the labor force offers little advantage in the establishment of more economically productive activities. Consequently, per capita incomes in the region are 17.5% below the regional average.

2. While the region is not prospering, it is socially and economically stable.

The social and economic difficulties that the region faces are not new, and unlike the dynamics evident in other parts of the nation (e.g. the loss of manufacturing employment in the Northeast and Midwest) there is no reason to believe that conditions will worsen significantly in the near future. Job loss has been gradual over the past two decades, and has been concentrated in the labor intensive agricultural sector; the loss of these jobs has been partially offset by an increase in employment in health care, education, and public administration. The number of migrants to the region, though below that of the Southwest as a whole, has remained steady over the past two decades. The social and cultural connections of the communities to the land are strong, and are likely to mitigate the impact of economic trends on the quality of life of local communities.

3. The National Grasslands provide a unique set of resources and contribute substantially to the viability of many communities in the region.

In this thinly populated and slow growing region, the resources provided by the National Grasslands have a significant impact. The total direct, indirect and induced impacts of the two National Grasslands Districts is about \$28.5 million. Grazing allotments on the National Grasslands, which generate more than \$10 million in total impacts, provide the margin necessary to make otherwise nonviable ranching operations viable. Further, oil & gas operations on the Black Kettle generate royalties that contribute nearly \$400,000 to schools and roads in Roger Mills County in Oklahoma. In addition, the National Grasslands support recreational activities, especially hunting, that generate more than \$3 million in revenues for local businesses. Finally, the direct payments by the FS to staff, contractors and suppliers help to support local business, with indirect and induced

impacts of nearly \$4 million generated in the local economy. By themselves, these contributions are not large in proportion to the overall economy, but in a region where the population is declining and incomes are low these contributions help to sustain community life.

4. Land use on the National Grasslands, and on FS land within the boundaries of the Grasslands, is more diverse and more sustainable than that of corresponding privately-owned land.

Compared to neighboring land, the National Grasslands has a third greater share of covered by herbaceous grasses and less used for developed agricultural purposes such as row crops and small grains. Moreover, within the boundaries of the grasslands, FS parcels are committed to a much more diverse pattern of land use, including larger proportions given to open water, wetlands, shrublands and evergreen forest. The vast majority of land under federal management on the National Grasslands (96.5%) is used for grazing, but the intensity of grazing on this land is substantially lower than that of privately-managed land within the boundaries of the National Grasslands – the stocking rate of FS land is 1 animal to 35 acres, nearly one-half that of private land.

5. The checkerboard pattern of federal landownership on the National Grasslands has both advantages and disadvantages that should be considered in management policies.

The principal advantage of the checkerboard pattern is that it leverages relatively small landholdings of public sector – only 23.5% of the total area within the boundaries of the National Grasslands is FS – to create a much wider impact zone. In addition, this facilitates the mission of the National Grasslands to promote landscape recovery and sustainable use by creating opportunities for the transfer of technology to private users on a parcel by parcel basis. It also makes feasible a more regular on/off grazing strategy. The disadvantages of the checkerboard pattern are that it inhibits the capacity of FS to implement effective wildlife management strategies; it impedes the development of large scale recreation and visitor programs; and creates potential barriers to access to public lands across private parcels.

6. The benefits associated with the National Grasslands are geographically very localized.

The National Grasslands provide substantial benefits to neighboring communities, but these benefits diminish sharply with distance. The vast majority of grazing permits for both Kiowa-Rita Blanca and the Black Kettle are held by persons and ranching operations that are based in communities within or immediately adjacent to the boundaries of the Grasslands. These communities also receive the benefits of the reduced pressure on privately owned land. In addition, the local distribution of nearly \$400,000 in oil & gas royalties generated on the Black Kettle is allocated exclusively within the boundaries of Roger Mills County – those outside but adjacent to the County receive only small state and federal benefits associated with oil & gas activities. Likewise, NVUM data suggests that the recreational benefits of the Grasslands are divided between a small number of persons making frequent visits from neighboring communities (within 30 miles) and a larger number of one-time visitors passing through the area; persons living an intermediate distance from the Grasslands (between 30 and 60 miles) make very little use of the recreational opportunities that the National Grasslands offer. Furthermore,

evidence suggests that local hunters traditionally make the greatest use of the Grasslands for larger game, while private land is increasingly used to attract hunters from outside the region. Finally, the scenic value of the Grasslands is appreciated most regularly by those who reside within or adjacent to its boundaries.

7. Within local communities, benefits of the National Grasslands are widely and relatively equally distributed.

Until very recently, there has been no significant concentration of grazing permits among individuals or ranching operations – permits have been held by a relatively wide cross section of the local communities, with no single permittee holding more than 12% of AUMs in either of the two Grasslands Districts. Also, the legislated allocation of all oil & gas royalties within Roger Mills County to county schools and roads ensures a wide and relatively distribution of benefit across the community. Finally, the relative isolation of the communities, particularly in area of Kiowa-Rita Blanca, results in an expenditure pattern that creates business opportunities and employment for a broad segment of the community.

8. Competition and conflict among uses and users of the National Grasslands is minimal; the issues most likely to affect future competition are demographic and economic change.

As stated in the **Attitudes, Beliefs and Values** focus group report for the National Grasslands, most community members prioritize economic opportunity in considering the management of the National Grasslands. This fundamental consensus is based on the common bonds of a rural economy and lifestyle. Many households in communities that neighbor the Grasslands depend either directly or indirectly on the land for their livelihood – a large number of households are engaged in cattle ranching, whether as a primary or secondary economic activity; oil & gas production provides some of the highest paying jobs in the regional economy, particularly in western Oklahoma and the Texas panhandle; and hunting is a long established source of food and recreation for people across the region. However, demographic change in other parts of the Southwest has begun to bring to the surface conflict between traditional communities with economic ties to the land and newer communities whose economic and cultural ties to region are recreational and aesthetic. At this point, there is little evidence of this sort of demographic change in the areas near the Grasslands, but should such change occur one might reasonably expect similar conflicts to emerge.

9. Many of the issues facing the Kiowa-Rita Blanca and the Black Kettle are similar, but there are significant differences.

There are a number of commonalities that link the two Grasslands districts – the rural character of the regions, stagnant demographic and economic trends, the checkerboard structure of landownership, and the predominance of ranching activities are among the most salient.

However, regional and forest-level managers must also recognize the important differences between the two Districts. First, the resource endowment of the Black Kettle is far greater than that of the Kiowa-Rita Blanca. Rich natural gas reserves generated \$12.4 million in revenues in 2004, creating jobs that paid \$3.44 million in direct, indirect and induced wages and salaries, while royalties from oil & gas operations pay about \$1.5

million annually to Federal, state and county governments. By the same token, the land on the Black is more fertile, with a carrying capacity per unit land that is 150% that of the Kiowa-Rita Blanca. The second significant difference is that the Black Kettle is more accessible than the Kiowa-Rita Blanca. This has two, contrary implications. On the one hand, the greater accessibility of the Black Kettle opens the area to a greater number of visitors, creating economic opportunities for the local communities. On the other hand, accessibility enables the loss or leakage of benefits associated with the Grasslands from the local communities. Visitors are more likely to spend their visit in outside the immediate area, in Elk City or even Amarillo, while those earning incomes on the Black Kettle, including FS employees and contractors, are more likely to spend their earning outside the area. This limits the capacity of agencies such as the FS to target programs to promote social and economic development.

9.2 Recommendations

A principal finding of this study is that impact of the National Grasslands is limited geographically, but in communities where its presence is felt it is significant. It is unlikely that the FS can significantly broaden its impact – the nature of the resources and the isolated character of the region impose severe limitations. However, opportunities exist for the FS to strengthen and consolidate its role within the communities that it presently affects. This would strengthen relationships with local communities and promote more sustainable use of the Grasslands.

1. FS should consider deepening its commitment to the equitable distribution of grazing permits.

Currently, grazing permits are equitably distributed among communities that neighbor the Grasslands, providing a margin for small ranchers and a much needed asset base to many households. Until recently, no single permittee has controlled more than 10% of the AUMs permitted by the National Grasslands. However, trends already evident in other sectors of the agricultural industry are beginning to manifest in assessment region, with pressures to concentrate permits among a few, larger ranching operations. Moreover, if this trend holds it is likely that a greater share of grazing allotments will be held by operations based outside the region. This would draw financial resources away from already economically struggling communities. Policies that encourage retention of grazing permits within local communities will help to support the vitality of these communities and in the long term further the overall mission of the National Grasslands to support sustainable land use and socioeconomic development.

2. FS should consider land management strategies that protect the ecological sustainability and traditional uses of the Mills Canyon in the Kiowa National Grassland.

Mills Canyon is a unique place in northeastern New Mexico, with a scenic river and canyon landscape, abundant wildlife, and historical and cultural value. Yet, there are substantial pressures that threaten to alter the traditional value of this area. Changes in New Mexico's Fish and Game regulations now limit deer hunting to permit draws, limiting access among local hunters who have traditionally made use of the opportunities that the Canyon offers. Further, the growing popularity of all-terrain vehicles (OHVs), and the specific interest of riders in the rough landscapes of the Canyon threaten severe

degradation of ecological value of the area. By acting affirmatively to protect the natural, cultural and recreational resources of Mills Canyon, and by better integrating these resources within the wider Kiowa-Rita Blanca Grasslands the FS could help to ensure sustainability the traditional social and ecological niche of Mills Canyon.

3. FS should consider land exchanges and other strategies to maintain access to publicly-owned land on the National Grasslands.

The checkerboard pattern of landownership ultimately leaves access to public lands under the control of a diverse group of private landowners. To date, this has not been a problem, as landowners have acknowledged the importance of collaboration with the public sector. However, increased recreational uses by OHVs and possible changes in demographics, economics and land uses associated with exurban development, already evident in other areas of the Southwest, may threaten this collaboration in the future as private landowners act to limit intrusions on their land. FS can help to ensure access for recreational users, hunters, grazing permittees and others by strategically assembling land that links government units to roadways and other points of public access.

4. FS should examine trends in regional and even national recreational use to identify possible niches for the National Grasslands in the growing eco-tourism industry.

Available evidence suggests that, like other sectors of the tourism industry, eco-tourism is increasingly specialized. Travelers are guided by very specific ecological and recreational interests. To some degree, the National Grasslands have benefited from these trends, especially among Rio Grande turkey and bobwhite quail hunters and bird watchers. By working with local communities, the FS may successfully foster other niche markets for eco-tourists and recreationists, creating new opportunities for local businesses. This would strengthen the Grasslands' relationship with their local communities and help to strengthen an economic base that is essential for the sustainable settlement of the region.

5. FS should continue to establish and promote partnerships and community relations on a regional scale.

During recent years, planners and economic development specialists have brought a renewed focus on the region as a critical scale for analysis, planning and project implementation. Communities that struggle to make it on their own have begun to realize significant benefits by sharing resources on a regional basis and putting forth a common and coherent image to outside areas. This is particularly true in rural areas, where individual communities often lack the scale and resources to act alone or attract outside investment and markets. This strategy may be highly relevant to the NG regions, which are severely constrained by its geographical isolation. Other communities in northeastern New Mexico and southern Colorado have begun to examine such opportunities, hoping to piece together a diverse program that would be attractive to travelers and businesses. Tourism development, which can be marketed on a regional basis with individual communities offering complementary attractions, is one such area of opportunity. These initiatives aim, in part, to benefit from the successful strategies utilized by communities in Colfax County, New Mexico and Las Animas County, Colorado in attracting visitors and investment.